

Claim 12 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. In claim 12 “water soluble” lacks clear antecedent basis in the specification as originally filed, and raises the issued of new matter.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 11-090488 Kobata et al.. Kobata et al. disclose (see Translation pages 3-5) a polymer formed from acrylamide, acrylic acid, and silanol groups substantially as claimed. The claims differ from Kobata et al. by reciting that the polymer has a specific formula. It is submitted that the polymerization of acrylamide, acrylic acid, and the silane monomers as in Kobata et al. would appear to form a polymer including the recited formula. It would have been obvious to one skilled in the art to modify the teachings of Kobata et al. by forming a polymer of the recited formula, to aid a producing a polymer for inhibiting scale formation in a water system. The specific percent of monomer units in the polymer, would have been considered an obvious matter of process optimization to one skilled in the art, depending on the specific use of the polymer and results desired, absent a sufficient showing of unexpected results.

Claims 8, 9, and 13 are allowed.

Applicants argue that Kobata et al. does not teach or suggest a scale inhibitor containing a polymer formed by three monomers such as acrylamide, acrylic acid and silane monomers, which is instantly claimed. It is submitted that the polymerization of acrylamide, acrylic acid, and the silane monomers as in Kobata et al. would appear to form a polymer including the formula, as recited in claim 10. It is noted that Kobata et al. disclose on page 3 that acrylamide and acrylic acid polymer scale inhibitors can be in form of an acid or salt. It is further noted that page 5 of Kubata et al. appears to teach that the acrylamide and acrylic acid monomers can be used in the form of their alkali-metal salts.

Applicants argue that Kubata et al. does not suggest any method or composition for the reduction or prevention of aluminosilicate scale, as disclosed in the instant specification. It is submitted that the instant claims are drawn to a polymer and not a method. It is submitted that the intended use for the polymer is a function limitation which fails patentably distinguish the instant claims over Kubata et al..

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Peter A. Hruskoci/ whose telephone number is (571) 272-1160. The examiner can normally be reached on Monday through Friday from 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter A. Hruskoci/  
Primary Examiner  
Art Unit 1797

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